#### PCB Presentation

George Jackson
Vice President of Sales
Trans-Cycle Industries, Inc.

#### Outline

- History
  - ◆Manufacture
  - ◆Use
- Regulations
  - ◆Banned
  - ◆Food/Feed
  - **♦**Fires Rule
  - →Mega Rule

- Disposal Options
  - ◆ Landfill
  - ◆ Incinerate
  - ◆ De-Tox
  - ◆ MCR
- Facilities
  - ◆ De-Tox
    - ◆ EPS Wheeling, WV
    - $\bullet$  TDS OK
    - Clean Harbors Tucker, GA
    - Clean Harbors Coffeyville, KS

- Facilities
  - **◆** Incineration
    - ◆ Clean Harbors Deer, TX
    - ◆ Clean Harbors Aragonite, UT
    - ◆ Onyx Port Arthur, TX
  - ◆ Landfills
    - ◆ U.S. Ecology Beatty, NV
    - ♦ Waste Management Emelle, AL
    - Waste Management Model City, NY
    - Clean Harbors Grassy Mountain, UT

- Facilities
  - Alternate Disposal
    - ◆ Trans-Cycle Industries, Inc. Pell City, AL
    - Clean Harbors Ashtabula, OH
    - Clean Harbors Coffeyville, KS
    - ◆TDS OK
    - ◆ EPS Wheeling, WV

# PCB's

- Polychlorinated Biphenyls
- First Synthesized in 1881
- Fire-Resistant
- Stable
- Do not conduct electricity

#### Use

- Capacitors
- Compressors
- Light Ballasts
- Rectifiers
- Transformers
- Adder to Paints

- Circuit Breakers
- Diffusion Pumps
- Potheads
- Switches
- X-Ray Units
- Insulation

#### OEM's

- \*Westinghouse
- \*Allis Chambers (AC)
- \*General Electric (GE)
- \*Others

\*Manufactured by Monsanto

# Major EPA Regulations

\*Source 40CFR 761

- \*1976 TSCA
- \*1980's Food & Feed Rules
- \*1985 Fires Rule
- \*1987 Notification / Manifest Rule
- \*1998 Mega Rule

# Toxic Substances Control Act of 1976 (TSCA)

- \*Section 6(e) Polychlorinated Biphenyls
  - \* Requires Immediate Disposal and Marketing Regulations
  - \* Bans Manufacture, Processing,
    Distribution in Commerce, and Use
  - \* Provides for Exclusions/Exemptions

# Food/Feed

- More of an interim measure
- Eliminated PCBs that could come into contact with food or feed process
- ■Small Impact

## Fires Rule

- Added 3 categories of PCB Classification
  - $1. \le 50 \text{ ppm} \text{Non-PCB}$
  - 2. 50-499 ppm PCB-Contaminated
  - 3. > 500 ppm PCB
- ■30 Meter Rule
- Retrofill became option

#### Notification/Manifest Rule

Had to obtain EPA Identification
 Number for any activity associated
 with PCBs

#### Mega Rule

- Impact
- ◆Federal registering of transformers
  - ◆www.gov.epa

# PCB Trade Names and Other Synonyms

- Aroclors
- Biphenyl, chlorinated
- No-Flamol
- Polychlorinated biphenyl

- Askarel
- Chlorextol
- PCB
- Pyranol

#### **PCB Trade Names and Other Synonyms**

Aceclor	Diaclor	PCB
Adkarel	Dicolor	PC8's
ALC	Diconal	PCBs
Apirolio	Diphenyl, chlorinated	Pheaoclor
Apirorlio	DK	Phenochlor
Arochlor	Duconal	Phenoclor
Arochlors	Dykanol	Plastivar
Aroclor	Educarel	Polychlorinated biphenyl
Aroclors	EEC-18	Polychlorinated biphenyls
Arubren	Elaol	Polychlorinated diphenyl
Asbestol	Electrophenyl	Polychlorinated diphenyls
ASK	Elemex	Polychlorobiphenyl
Askael	Elinol	Polychiorodiphenyl
Askarel	Eucarel	Prodelec
Auxol	Fenchlor	Pydraul
Bakola	Fencior	Pyraclor
Biphenyl, chlorinated	Fenocloro	Pyralene
Chlophen	Gilotherm	Pyranol
Chloretol	Hydol	Pyroclor
Chlorextol	Hyrol	Pyronol
Chlorinated biphenyl	Hyvol	Saf-T-Kuhl
Chlorinated diphenyl	Incior	Saf-T-Kohl
Chlorinol	Inerteen	Santosol
Chlorobiphenyl	Inertenn	Santotherm
Chlorodiphenyl	Kanechlor	Santothern
Chlorphen	Kaneclor	Santovac
Chorextol	Kennechlor	Sotvol
Chorinol	Kenneclor	Sorol
Chorinol	Leromoll	Soval
Clophen	Magvar	Sovol
Clophenharz	MCS 1489	Sovtol
Cloresil	Montar	Terphenychlore
Clorinal	Nepolin	Therminal
Clorphen	No-Flamol	Therminol
Decachlorodiphenyl	NoFlamol	Turbinol
Delor	Non-Flamol	I OI DII IOI
Delorene	Olex-sf-d	
	Orophene	

# Not Manufactured But Could Contain

- ■Mineral Oil
- ■10-C Oil
- Silicone
- Others

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